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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/810,717 | 03/29/2004 | Kaoru Urata | SON-2962 | 9365 |

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EXAMINER

MERCEDES, DISMERY E

ART UNIT PAPER NUMBER

2651

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--|-------------------------------------|--|
| Office Action Summary | Application No. 10/810,717 | Applicant(s) URATA ET AL. | |
| | Examiner Dismery E. Mercedes | Art Unit 2651 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 8 and 9 is/are rejected.
- 7) ☒ Claim(s) 3-7 and 10-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kashida et al. (US 5,790,746), in view of Shimotashiro et al. (US 5,321,557).

Kashida et al. a reproducing apparatus, comprising reproduced signal processor for performing error correction processing on data generated from a signal obtained by said multiple reproducing heads, discriminating a reproducing head whose tracing condition of a target track is appropriate from said multiple reproducing heads based on a result of the error correction, and generating an output signal using a signal obtained by the discriminated reproducing head (abstract).

Kashida et al. fails to particularly disclose a head assembly including multiple reproducing heads provided for a single track with said heads being deviated in their positions from each other in the track width direction. However, Shimotashiro et al. discloses such (as depicted in Figs. 3-5). It would have been obvious to one of ordinary skill in the art, at the time of invention to modify the reproducing apparatus of Kashida et al. by implementing a head assembly as disclosed by Kashida et al. the motivation being because it would provide such apparatus with the enhanced capability of expanding the tracking margin without increasing the disturbance by the adjacent crosstalk (col.2, lines 51-59 of Shimotashiro et al.).

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As to Claim 8, drawn to a method corresponding to the apparatus of claim 1, is rejected for similar reasons set forth in the rejection of claim 1, *supra*.

3. Claims 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Kashida et al. (US 5,790,746), in view of Shimotashiro et al. (US 5,321,557), further in view of Arai (US 2001/0049804 A1).

As to Claim 2, Kashida et al. in view of Shimotashiro et al. discloses the apparatus of base claim 1, but fails to particularly disclose wherein said reproduced signal processor performs the error correction using an internal code parity.

However, Arai discloses an apparatus that performs the error correction using an internal code parity (page 3, [0037, 0044-0047]). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus disclosed by Kashida et al. and Shimotashiro et al. by implementing error correction using internal code parity as disclosed by Arai, the motivation being because it would provide their apparatus with a reliable error correction coding which is well known in the art of recording/reproduction operation.

As to Claim 9, drawn to a method corresponding to the apparatus of claim 2, is rejected for similar reasons set forth in the rejection of claim 2, *supra*.

Allowable Subject Matter

4. Claims 3-7 and 10-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Inoue et al. (US 6,134,061); Yamasaki et al. (US 5,751,890); Asakura et al. (US 6,639,747 B2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dismery E. Mercedes whose telephone number is 571-272-7558. The examiner can normally be reached on Monday - Friday, from 9:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dismery E Mercedes
Examiner
Art Unit 2651

DM



DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600